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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,590	07/30/2007	Richard C. Ebersole	CL2272USPCT	8973

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E I DU PONT DE NEMOURS AND COMPANY  
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WILMINGTON, DE 19805

EXAMINER
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CHEN, STACY BROWN

ART UNIT	PAPER NUMBER
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1648

NOTIFICATION DATE	DELIVERY MODE
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11/18/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-Legal.PRC@usa.dupont.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,590	<b>Applicant(s)</b> EBERSOLE ET AL.	
	<b>Examiner</b> Stacy B. Chen	<b>Art Unit</b> 1648	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☒ Claim(s) 4 is/are rejected.
- 7) ☒ Claim(s) 5-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/29/08</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-8 are pending and under examination. In a telephone conversation with Edward Rehberg on November 3, 2008, patentable subject matter was discussed but agreement was not reached.

#### ***Specification***

2. The specification is objected to because it fails to reference that is a national stage application of PCT/US03/41808, filed December 19, 2003. Correction is required.

#### ***Claims Summary and Interpretation***

3. The claims are drawn to a method of detecting the presence of foot and mouth disease virus (FMDV) in a sample. The method steps comprise RT-PCR amplification using at least one primer pair that includes SEQ ID NO: 16 and either SEQ ID NO: 17, 18, 19 or 20. Also claimed are polynucleotide sequences comprising SEQ ID NO: 16-20, and kits comprising at least one primer pair that includes SEQ ID NO: 16 and either SEQ ID NO: 17, 18, 19 or 20, reverse transcriptase and thermostable DNA polymerase. Also claimed is a tablet and composition comprising a tablet that comprises at least one primer pair that includes SEQ ID NO: 16 and either SEQ ID NO: 17, 18, 19 or 20, reverse transcriptase and thermostable DNA polymerase.

Note that the subject matter of claim 4, “comprising SEQ ID NO: 16”, for example, is interpreted by the Office to read on any polynucleotide that contains SEQ ID NO: 16. There are no length limitations on the polynucleotide sequence of claim 4.

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***Claim Objections***

4. Claims 5-8 are objected to for minor informalities. Claims 5, 6 and dependent claims 7 and 8 recite, “selected from the group consisting essentially of”. This is improper Markush language. Correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Beard et al. (Journal of Virology, 2000, 74(2):987-991, “Beard”). As discussed above, the subject matter of claim 4, “comprising SEQ ID NO: 16”, for example, is interpreted by the Office to read on any polynucleotide that contains SEQ ID NO: 16. There are no length limitations on the polynucleotide sequence of claim 4. Thus, Beard’s disclosure of the entire genome of the type O FMDV anticipates the instantly claimed polynucleotide because the genome of type O FMDV naturally contains SEQ ID NO: 16-20 (see instant specification, page 11, lines 11-13, and Table 1 on page 12).

Chapter 2111.03 of the MPEP [R-3] provides guidance on the use of transitional phrases “comprising”, “consisting essentially of” and “consisting of” as they define the scope of a claim with respect to what unrecited additional components or steps, if any, are excluded from the scope of the claim. The transitional term “comprising”, which is synonymous with “including,”

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“containing,” or “characterized by,” is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. The transitional phrase “consisting of” excludes any element, step, or ingredient not specified in the claim. The transitional phrase “consisting essentially of” limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. For the purposes of searching for and applying prior art under 35 USC 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, “consisting essentially of” will be construed as equivalent to “comprising.”

MPEP 2163 (II, A, (1)) states that If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of “consisting essentially of,” applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention.

In view of the above teachings in the MPEP, note that the amendment of the claims to “consisting essentially of” will not be sufficient to overcome the art rejection because the claims will still be interpreted as “comprising”. The isolated nucleotide disclosed by Beard is capable of use in the detection of FMDV because the claim is not limited to any particular detection method that might exclude the possibility of using the full length genome of type O FMDV.

### ***Conclusion***

6. Claims 1-3 are allowable.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Callahan *et al.* (US 2003/0149259 A1) discloses FMDV diagnostics comprising

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primer sequences from the 3D gene (see Table 1 of Callahan). Callahan *et al.* does not teach or suggest the use of sequences from the 2A/2B locus, as claimed by Applicant.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy B. Chen whose telephone number is 571-272-0896. The examiner can normally be reached on M-F (7:00-4:30). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Stacy B Chen/ November 4, 2008  
Primary Examiner, Art Unit 1648